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## WHAT IS CLAIMED IS:

 A transmission method for identifying infrared transmission head functions through an infrared controller coupled to an infrared transmission head, said method comprising said steps of:

setting said infrared controller in a test circuit mode;

selecting a test brand name and a test transmission mode among a plurality of brand names;

programming said infrared controller according to the test transmission mode corresponding to the test brand name of said infrared transmission head and sending out transmission test data;

receiving test data according to the test transmission mode corresponding to the test brand name of said infrared transmission head;

registering said test band name and associated test transmission mode of said infrared transmission head when said transmission test data and said received test data are identical; and

operating said infrared transmission head according to the registered test brand name and test transmission mode of said infrared transmission head.

- The transmission method of claim 1, wherein said method further includes repeating said steps until all said brand names have been selected as a test brand name.
- The transmission method of claim 1, wherein said infrared transmission controller supports simultaneous data transmission and reception.
- The transmission method of claim 1, wherein said infrared controller further includes a direct access memory unit partitioned into two separate groups, one group is

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used for holding transmission test data while said other group is used for holding received test data.

- 5. The transmission method of claim 1, wherein said infrared controller is enclosed within a South Bridge control chipset such that said South Bridge control chipset provides a few leads to serve as terminals of said infrared controller for data transmission and reception.
- A transmission method for identifying infrared transmission head functions, comprising said steps of:

providing an infrared controller coupled to an infrared transmission head; programming said infrared controller and sending out transmission test data; receiving reception test data; and

registering said test brand name and associated test transmission mode of said infrared transmission head when said transmission test data and said reception test data is identical.

- The transmission method of claim 6, wherein said infrared controller supports simultaneous data transmission and reception.
- The transmission method of claim 6, said infrared controller works under a test circuit mode.
- 9. The transmission method of claim 6, wherein said step of sending out transmission test data is based on said test transmission mode corresponding to the test brand name of said infrared transmission head

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- 10. The transmission method of claim 6, wherein said step of receiving reception test data is based on said test transmission mode corresponding to the test brand name of said infrared transmission head.
- 11. The transmission method of claim 6, wherein said method further includes selecting test brand name and associated test transmission mode among a plurality of brand names
  - 12. The transmission method of claim 6, wherein said method further includes repeating said steps until all said brand names have been selected to serve as a test brand name.
  - 13. The transmission method of claim 6, wherein said infrared controller further includes a direct access memory unit partitioned into two separate groups, one group is used for holding transmission test data while said other group is used for holding received test data.
- 14. The transmission method of claim 6, wherein said infrared controller is enclosed within a South Bridge control chipset such that said South Bridge control chipset provides a few leads to serve as terminals of said infrared controller for data transmission and reception.